

List of claims

1- 72 Canceled.

73. (New). A device for producing mechanical vibrations in response to an electrical signal, comprising

a piezoelectric component having two opposing surfaces, said piezoelectric component further having at least two points where polarity is recognized; and wherein the piezoelectric component has a T-shaped planform.

74. (New) The device according to claim 73, wherein the piezoelectric component comprises a unimorph piezoelectric structure having piezoelectric material bonded between two metallic support layers.

75. (New) The device according to claim 73, wherein the piezoelectric component comprises a bimorph piezoelectric structure having piezoelectric material bonded to two different

76. (New) The device according to claim 73 wherein at least one acoustic member is attached to one of the surfaces of the piezoelectric component.

77. (New) The device according to claim 73 further comprising a clamp, connected at the neck region of the piezoelectric component, for coupling the piezoelectric component to a base in a cantilever fashion.

78. (New) The device according to claim 73 further comprising a clamp, connected at one end of the piezoelectric component, for coupling the piezoelectric component to a base.

79. (New) The device according to claim 73 further comprising means, positioned at one end of the piezoelectric component, for adjustably connecting the piezoelectric component to a base surface.

80. (New) An acoustic member for amplifying sound, comprising a surrounding wall portion connected to two end portions, said one end portion having an orifice to form a passageway through the end portion, said other end portion is that of a mechanically excited vibrating surface to form an enclosed chamber within the

acoustic member when the bottom surface of the acoustic member is connected to the piezoelectric component.

81. (New) The device of claim 80 where the mechanically excited vibrating surface is a piezoelectric device.

82. (New) The device of claim 80 where the acoustic member is operatively connected to the surface of any transducer capable of producing mechanical vibrations

83. (New) The device according to claim 73 wherein the mechanical vibrations are of sufficient force to produce audible sound over substantially the entire audible frequency range.

84. (New) The device according to claim 73 wherein the mechanical vibrations are of sufficient force as to be readily felt by a holder of the device.

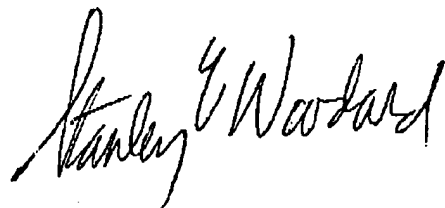
85. (New) The device according to claim 81, wherein the point of attachment of at least one acoustic member is approximately at an anti-node of the piezoelectric component.

86. (New) A device for producing mechanical vibrations in response to an electrical signal, comprising

a piezoelectric component having two opposing surfaces, said piezoelectric component further having at least two points where polarity is recognized; and wherein a dampening material substantially covers at least one surface of the piezoelectric device, said damping material has low elastic modulus similar to those of group of material consisting of polyolefin, synthetic polyolefin, 3M Scotch (TM) 468 MP High Performance Adhesive or 3M Scotch (TM) 859 Removable Mounting Squares.

87. (New) The device according to claim 73 wherein a dampening material substantially covers at least one surface of the piezoelectric device, said damping material has low elastic modulus similar to those of group of material consisting of polyolefin, synthetic polyolefin, 3M Scotch (TM) 468 MP High Performance Adhesive or 3M Scotch (TM) 859 Removable Mounting Squares

88. (New) The device of claim 87 where one or more acoustic members are operatively connected to the surface of the piezoelectric device



Stanley E. Woodard